UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: **COMMISSIONER FOR PATENTS**
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,369	12/29/2000	Patrick Doyle	042390.P9017	2184

7590   06/06/2006

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

EXAMINER
CHANKONG, DOHM

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

JUN 0 6 2006

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/752,369
Filing Date: December 29, 2000
Appellant(s): DOYLE ET AL.

Mark C. Van Ness
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3.15.2006 appealing from the Office action mailed 8.9.2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6735660	Osten et al	12-2000
6732249	Pickreign, et al	6-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1>   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of

2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-

AIPA 35 U.S.C. 102(e)).

2>   Claims 1-6, 8-22 and 24-26 are rejected under 35 U.S.C 102(e) as being anticipated by

Osten et al (hereinafter Osten), U.S Patent No. 6,735,660.

3>   As to claim 1, Osten teaches a method comprising:

requesting an Infiniband connectivity configuration (column 7, lines 49-53, claim 8);

receiving a response regarding whether the requested configuration can be provided

(column 7, lines 49-53, column 8, lines 41-46 where : the host requests the configuration from a

database);

attempting to establish the requested connectivity configuration if the response to the

request is affirmative (column 7, lines 49-53, column 8, line 59 to column 9, line 8 where : the

host receives the configuration from the database and corresponds to an "affirmative"

response" from the database).

4>   As to claim 2, Osten teaches a method wherein the requested connectivity

configuration is not contained in the specification established for the InfiniBand architecture

(column 2, lines 53-65 and column 5, line 57 to column 6, line 11 – since the concept of sideband

communications was not in the 'standards' for InfiniBand, Osten's conceptualization of

sideband communications in the InfiniBand architecture was not in the original spec).

5>   As to claim 3, Osten teaches a method wherein the requested connectivity

configuration is comprised of a plurality of links (column 2, line 59 and column 5, line 66 to

column 6, line 11 where the signal positions are equivalent to the links) .

6>   As to claim 4, Osten teaches a method wherein the requested connectivity

configuration is provided using a standard InfiniBand backplane connector (column 5, line 57

to column 6, line 3).

7>   As to claim 5, Osten teaches a method wherein said request for a connectivity

configuration is made by an Infiniband module to an Infiniband chassis management entity

(column 7, lines 9-15, column 7, lines 49-57 and line 58 to column 8, line 14 where the IOA is

the module and Osten's database and processor are collectively functional as a chassis

management entity).

8>   As to claim 6, Osten teaches a method wherein said request for a connectivity

configuration is made through an InfiniBand management link (column 8, lines 8-34).

9>   As to claim 8, Osten teaches a method comprising:

receiving a connectivity configuration request associated with an InfiniBand

connector, the configuration request representing an expanded InfiniBand connector

configuration including information indicative of one or more desire links to be established

through the InfiniBand connector and assigning one or more physical lanes of the InfiniBand

connector to each of the one or more desired links (column 7, lines 49-53, column 8, lines

claims 8, 9, 14 and 15);

      providing a response to the connectivity configuration request indicating whether the

requested expanded Infiniband connector configuration can be provided (column 8, line 59 to

column 9, line 1); and

      configuring the InfiniBand connector in accordance with said connectivity

configuration request (column 9, lines 1-8 and claim 13).

10>   As to claim 9, Osten teaches a method wherein said connectivity configuration is made

by an Infiniband module to an Infiniband chassis management entity (column 7, lines 9-15,

column 7, lines 49-57 and line 58 to column 8, line 14 where the IOA is the module and Osten's

database and processor are collectively functional as a chassis management entity).

11>   As to claim 10, Osten teaches a method wherein said expanded InfiniBand connector

configuration is not contained in the specification established for the InfiniBand architecture

(column 2, lines 53-65 and column 5, line 57 to column 6, line 11).

12>   As to claim 11, Osten teaches a method wherein said expanded InfiniBand connector

configuration is comprised of a plurality of links (column 2, line 59 and column 5, line 66 to

column 6, line 11 where the signal positions are equivalent to the links).

13>   As to claim 12, Osten teaches a method comprising:

an InfiniBand management link operating to enable the establishment of an

InfiniBand connectivity configuration (column 7, lines 43-49 and claim 14), wherein said

management link:

> records a request for a connectivity configuration made by an InfiniBand

> module (column 7, lines 49-53 and claim 8);

> allows an InfiniBand chassis to obtain said request for a connectivity

> configuration (column 7, lines 49-52 and column 8, lines 22-31);

> records a response from said InfiniBand chassis to said request for a

> connectivity configuration (column 8, lines 22-31, column 8, line 66 to column 9, line 4,

> and claim 8);

> allows said InfiniBand module to obtain said response to said request for a

> connectivity configuration (claim 27).

14>   As to claim 13, Osten teaches the method wherein the requested connectivity

configuration is not contained in the specification established for the InfiniBand architecture

(column 2, lines 53-65 and column 5, line 57 to column 6, line 11).

15>   As to claim 14, Osten teaches the method wherein said request for a connectivity

configuration is written to a first management link configuration register and said response to

said request is written to a second management link configuration register (column 7, lines 16-

34 and lines 43-53 and claim 27).

16>   As to claim 15, Osten teaches the method wherein the requested connectivity

configuration is comprised of a plurality of links (column 2, line 59 and column 5, line 66 to

column 6, line 11).

17>   As to claim 16, Osten teaches a network apparatus comprising:

an InfiniBand connector (column 6, lines 3-11);

an InfiniBand module to make a request for an expanded connectivity configuration

for the InfiniBand connector (column 7, lines 43-57);

a chassis management entity coupled to said InfiniBand module, the chassis

management entity to receive the request for an expanded connectivity configuration for the

InfiniBand connector and to provide a response regarding whether the requested configuration

can be provided (column 7, lines 49-57, column 7, line 58 to column 8, line 21 where: Osten's

database and processor collectively provide the same functionality of the management entity).

18>   As to claim 17, Osten teaches the network apparatus wherein the requested

connectivity configuration is not contained in the specification established for the InfiniBand

architecture (column 2, lines 53-65 and column 5, line 57 to column 6, line 11).

19>   As to claim 18, Osten teaches the network apparatus wherein the requested

connectivity configuration is other than:

a single link comprised of a connection to the first pin of a plurality of pins on the

InfiniBand connector;

a single link comprised of a connection to the first four pins of the plurality of pins on

the InfiniBand connector; or

a single link comprised of a connection to the first twelve pins of the plurality of pins

on the InfiniBand connector (column 6, lines 3-11 and claims 8 and 9).

20>   As to claim 19, Osten teaches the network apparatus wherein said InfiniBand module is

operable to establish the requested connectivity configuration if the response to the request is

affirmative (column 8, line 59 to column 9, line 8).

21>   As to claim 20, Osten teaches the network apparatus wherein said requested

connectivity configuration is comprised of a plurality of links that are provided

simultaneously through said InfiniBand connector (column 5, line 57 to column 6, line 11 and

claim 8).

22>   As to claim 21, Osten teaches the network apparatus wherein the InfiniBand connector

is a standard InfiniBand backplane connector (column 5, line 57 to column 6, line 3).

23>   As to claim 22, Osten teaches the network apparatus wherein said request for a

connectivity configuration is made through an InfiniBand management link (column 8, lines

8-34).

24>   Claim 24 is a machine readable medium with stored sequences of instructions that

performs the steps of the method of claim 1. Therefore, claim 24 is rejected for the same

reasons as set forth in above paragraph 4 for claim 1.

25>   Claim 25 is the machine readable medium that performs the step of the method of

claim 2. Therefore, claim 25 is rejected for the same reasons as set forth in above paragraph 5

for claim 2.

26>   Claim 26 is the machine readable medium that performs the step of the method of

claim 3. Therefore, claim 26 is rejected for the same reasons as set forth in above paragraph 6

for claim 3.

Claim Rejections - 35 USC § 103

27>   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

28>   Claims 7 and 23 are rejected under 35 U.S.C § 103(a) as being unpatentable over Osten,

in view of Pickreign et al, U.S Patent No. 6.732.249 ["Pickreign"].

29>   As to claim 7, Osten does not specifically teach a method wherein said request for a

connectivity configuration is written to a first management link configuration register and

said response to said request is written to a second management link configuration register.

30>   Pickreign discloses a similar configuration to Osten, i.e. connecting an adapter to a

computer network. Pickreign further discloses a method wherein said request for a

connectivity configuration is written to a first management link configuration register and

said response to said request is written to a second management link configuration register

[Figure 1 «items 35-39» | column 2 «line 43» to column 3 «line 2»]. It would have been obvious

to one of ordinary skill in the art to incorporate Pickreign's register functionality into Osten to

allow Osten's adapters and host computer to dynamically communicate data and information

effectively and efficiently [column 1 «lines 33-38»]. One would have been motivated to

perform such an implementation as Osten discloses modifying the communications between

the adapter and host using memory [column 7 «lines 55-57»].

31>   As to claim 23, as it merely is a claim to a network apparatus that implements the steps

of the method of claim 7, it does not teach or further define over the claimed limitations.

Therefore claim 23 is rejected for the same reasons set forth for claim 7, supra.

(10) Response to Argument

I.   Applicant's Argument

Applicant's arguments focus primarily on claim 1. Applicant argues that the Osten

reference does not teach a process that provides for a request for a configuration and a

response to the configuration request. Applicant's Appeal Brief, pg. 10, ¶3. Further, Applicant

argues that Osten describes a one-way process in which a host reads configuration

information, not a two-way communication with a request and a response. Id, pg. 11, ¶1.

Applicant also asserts that even if Osten's database functionality read upon claim 1's

limitations, they do not apply to claims 5, 9, 12 and 16. Finally, Applicant argues that the

Pickreign reference does not contain the elements missing from Osten. Id., pg. 11, ¶4. The

Office disagrees for the reasons set forth below.

A.   Osten discloses two embodiments that describe request-response functionality

Pending claims must be given their broadest reasonable interpretation consistent with

the specification. MPEP §2111. Initially, it should be noted that Applicant's specification

describes a "request" in general terms and does not provide a particular implementation

beyond what is described in the claims. The specification merely discloses that the request for

Infiniband configuration information is submitted by a module.

There are two embodiments in Osten that read on Applicant's claim limitations. First,

Osten discloses an embodiment of his invention (hereinafter referred to as "first

embodiment") where Infiniband configuration information is retrieved from an Input|Output

adapter (IOA): "the control logic is configured to initiate retrieval of the sideband

configuration information *in response* to detecting insertion of the primary connector of the

IOA into the slot connector" (emphasis added) [claim 22]. The detection is done by detecting

a presence signal [claim 11].

In regards to the first embodiment Applicant asserts that Osten is deficient, in part

because "there is no communication back and forth between the devices". Applicant's Appeal

Brief, pg. 8, ¶2. The Office submits that Osten's presence signal may constitute a request.

Applicant disagrees.

One of ordinary skill in the art could reasonably interpret Osten's presence signal as a

request for configuration information because Infiniband configuration information is

retrieved in response to detecting the presence signal. The retrieval of the configuration

information corresponds to the claimed response signaling that the configuration can be

provided. Once retrieved, the configuration information is checked to insure compatibility

with the requesting IOA [claim 23]. The presence signal and corresponding configuration

information can reasonably be interpreted as a request-response action in Osten's system.

This interpretation is consistent with Applicant's specification. Applicant's specification, pg.

7, lines 14-19. Thus, Osten's first embodiment contains both the elements of requesting an

Infiniband configuration and receiving a response regarding whether the requested

configuration can be provided.

Second, Osten also explicitly discloses an embodiment (hereinafter referred to as

"second embodiment") whereby a make or model identifier may be provided to a database in

order to obtain relevant configuration information [column 7 «lines 49-52»]. The Office

contends that the provision of the identifier constitutes a request. Applicant disagrees.

Applicant argues that provision of an identifier that results in retrieval of the corresponding

configuration information does not correspond to request-response functionality. However, it

seems reasonable to one of ordinary skill in the art to interpret Osten's provisioning of the

make identifier as a request for configuration information because the relevant configuration

information is obtained only in response to the provisioning of the identifier.

The database may affirmatively respond to the request by submitting the requested

configuration information. The system then establishes the requested connectivity

configuration upon receiving configuration information [column 3 «lines 40-42»]. Thus,

Osten's second embodiment also contains both the elements of requesting an Infiniband

configuration and receiving a response regarding whether the requested configuration can be

provided.

Both of these embodiments describe request-response functionality, whereby

Infiniband configuration information is retrieved in response to either a make identifier or a

presence signal. Both the submission of the make identifier or presence signal may reasonably

be interpreted as a request for configuration information. The subsequent retrieval of the

corresponding configuration information constitutes a response that signals that the

configuration can be provided. Both of Osten's embodiments read on the elements of claim 1.

B.   Osten's database functionality reads upon the limitations of claims 5, 9, 12 and 16

Applicant argues even if Osten's database functionality is construed as a request-

response that the functionality does not apply to dependent claims. Applicant's Appeal Brief,

pg. 10, ¶2. The substance of these claims refer to the request (for configuration information)

being submitted to an Infiniband chassis management entity. Applicant's specification

describes the chassis management entity as being part of an Infiniband chassis. The only other

responsibility, as described in the specification and claims, of the chassis management entity is

to respond to the request.

In Osten's second embodiment, a request for configuration information is submitted to

a database in the form of a model or make identifier. In response to the request, the database

affirmatively responds with the requested configuration information. Nothing in Applicant's

specification prevents interpreting the chassis management entity as a database. Osten's

database provides the same functionality as Applicant's claimed chassis management entity.

C.   Pickreign discloses configuration request and response functionality

Pickreign was relied upon to teach elements of claims 7 and 23. These claims are

directed towards the request-response functionality, as discussed above. These claims contain

the additional limitation whereby the request and response are written to registers. Applicant

argues that Pickreign is not relevant to elements of requesting Infiniband configuration or

receiving a response whether the requested configuration can be provided.

However, the Office submits that Pickreign's teachings are entirely relevant to Osten's

invention. Like Osten, Pickreign is concerned with the initial configuration between network

adapters and host computers [see Pickreign, column 1 «lines 7-10» | column 2 «lines 48-53» &

Osten, column 3 «lines 23-30»]. Pickreign discusses utilizing a PCI (Peripheral Component

Interconnect) bus to communicate configuration requests and responses between the adapter

and the host [column 2 «lines 43-45»]. Similarly, Osten discloses utilizing both PCI buses and

Infiniband buses [column 1 «lines 61-65» | column 9 «lines 20-31»].

Pickreign expressly discloses writing a configuration request to a configuration register

and writing the corresponding response to the configuration request to another configuration

register [column 3 «lines 29-35» | column 2 «lines 48-53»]. One of ordinary skill in the art

could have reasonably combined Osten's invention with Pickreign's teachings to provide a

more efficient means of transferring configuration requests and responses between the adapter

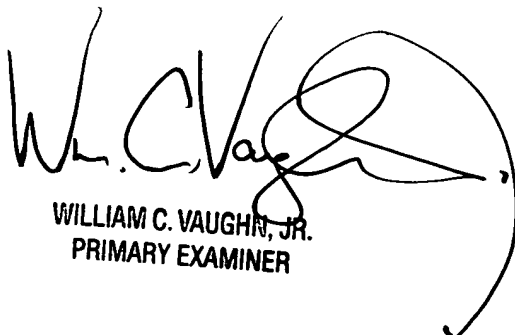and host system [see Pickreign, column 1 «lines 33-38»].

II.   Conclusion

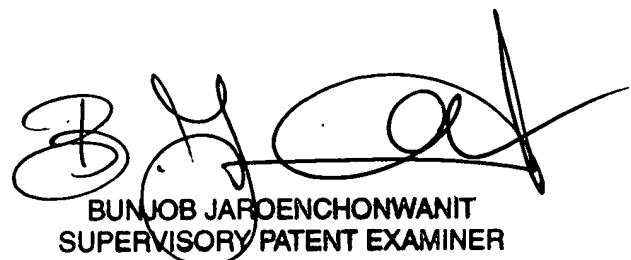For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Dohm Chankong
May 22, 2006

Conferees:

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER